## Recombinant Human IL-32 alpha protein(His Tag)

Catalog Number: PKSH034116



Note: Centrifuge before opening to ensure complete recovery of vial contents.

**Description** 

Synonyms IL-32alpha;IL-32beta;IL-32delta;IL-32gamma;NK4;TAIF;TAIFa;TAIFb;TAIFc;TA

IFd

SpeciesHumanExpression HostE.coli

Sequence Met 1-Lys 131
Accession P24001-4
Calculated Molecular Weight 15.7 kDa
Observed molecular weight 18 kDa
Tag C-His

**Bioactivity** Measure by its ability to induce TNF alpha secretion in RAW264.7 cells. The ED<sub>50</sub>

for this effect is  $< 10 \mu g/mL$ .

**Properties** 

**Purity** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin**  $< 0.1 \text{ EU per } \mu \text{g of the protein as determined by the LAL method.}$ 

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS,pH 8.0.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

## **Background**

IL-32 is a recently discovered cytokine that induces various proinflammatory cytokines (TNF-alpha, IL-1beta, IL-6) and chemokines in both human and mouse cells through the NF-kappaB and p38 MAPK inflammatory signal pathways. It is regulated robustly by other major proinflammatory cytokines and is crucial to inflammation and immune responses. Four of the IL-32 isoforms (alpha, beta, gamma, and delta) are the most representative IL-32 transcripts, and the gamma isoform of IL-32 is the most active, although all isoforms are biologically active. IL-32, a cytokine produced mainly by T, natural killer, and epithelial cells induces significant amounts of TNFalpha and MIP-2 and increases the production of both cytokines in a dose-dependent manner. IL-32 has been implicated in inflammatory disorders, Mycobacterium tuberculosis infections, inflammatory bowel disease, and influenza A virus infection, as well as in some autoimmune diseases, such as rheumatoid arthritis, ulcerative colitis, and in the human stomach cancer, human lung cancer, and breast cancer tissues. Thus, IL-32 expression might be valuable as a biomarker for cancer.

## For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com Email: techsupport@elabscience.com